

Introduction to the



Martin Gaynor

Chair, Governing Board, HCCI

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Motivation

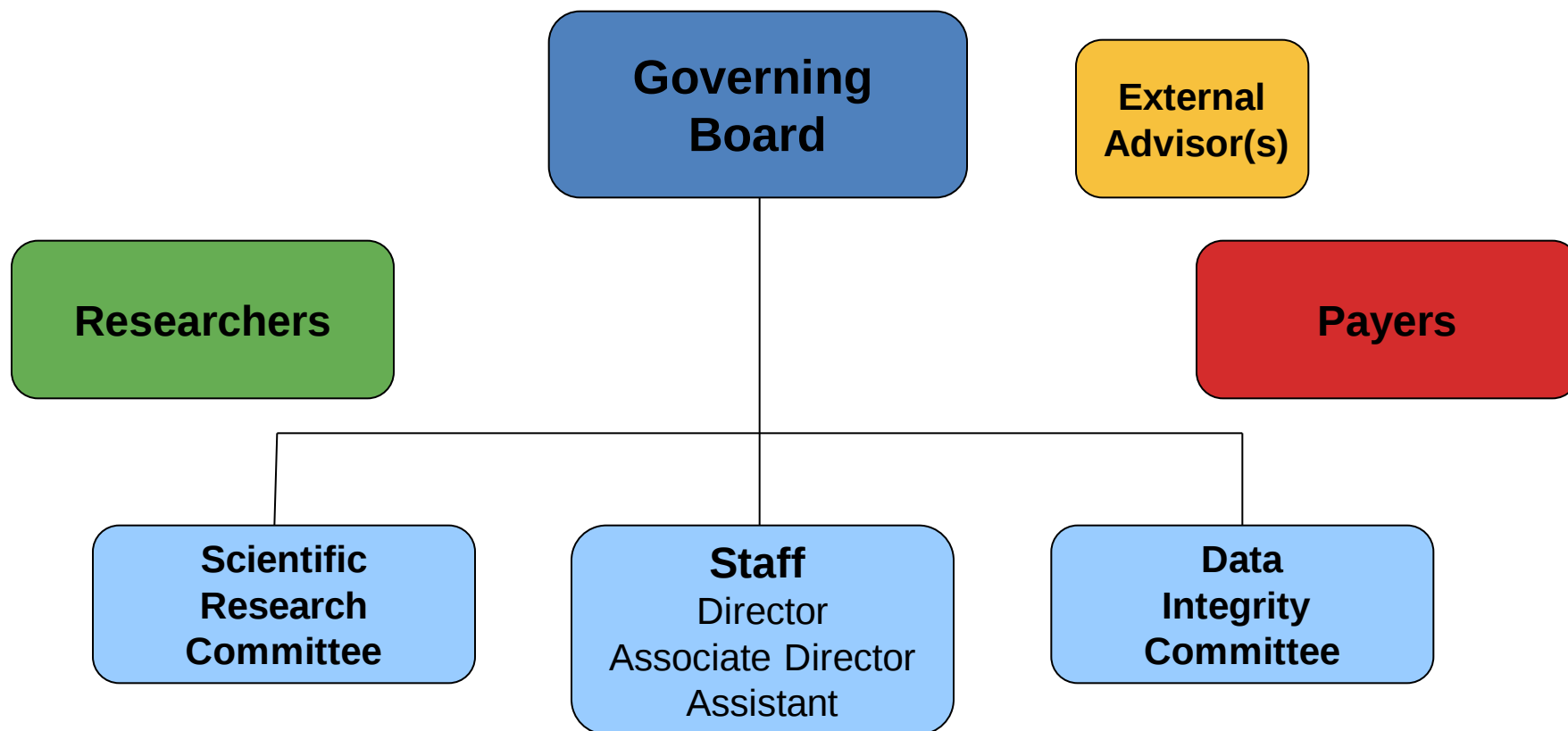
- US Health Care Costs are high and rising rapidly.
 - \$2.6 trillion in 2010
 - Predicted to rise to \$4.6 billion by 2020*.
 - Almost double current levels.
 - 17.9% of GDP 2010; 19.8% 2020.
 - This is a big problem for the US.
- Information about costs and their drivers are key.
 - At present we have very incomplete information on the privately insured (about 2/3rds of those with coverage).
 - Limits research; hinders policy and business.

*Keehan et al., 2011. "National Health Spending Projections Through 2020." *Health Affairs*. 30(8): 1594-1605/

HCCI

- Goals
 - Provide complete, accurate, up to date information on health care costs.
 - Inform research, public policy, business, and the general public.
 - Advance knowledge and policy debates.
- Data
 - Aetna, Humana, Kaiser Permanente, UnitedHealthcare providing access to data.
 - Others expected to join.
 - 5 billion medical claims records, \$1 trillion in spending since 2000; 5,000 hospitals and 1 million+ providers.
 - 50-55 commercial million covered lives per year.
 - 8-10 million Medicare Advantage covered lives per year.
 - Commercial plans – Some government data from Medicare Fee for Service and Medicare Advantage. Medicaid under consideration to be added later.
 - Updated regularly.
 - HIPAA-compliant: de-identified data only.

Organization



Leadership

- Board
 - David Dranove, Ph.D.
 - Walter McNerney Professor of Health Industry Management, Northwestern University
 - Martin Gaynor, Ph.D., Chair
 - E.J. Barone Professor of Economics and Health Policy, Carnegie Mellon University
 - Alan Garber, M.D., Ph.D.
 - Provost and Professor of Health Care Policy and of Economics, Harvard University
 - Jonathan Gruber, Ph.D.
 - Professor of Economics, Massachusetts Institute of Technology
 - Elizabeth Nabel, M.D.
 - President, Brigham and Women's Hospital
 - Stephen Parente, Ph.D.
 - Professor of Health Finance and Insurance, University of Minnesota
 - Theodore Prospekt
 - Vice President, Center for Health Care Reform, United Healthcare
 - Dale Yamamoto, F.S.A., M.A.A.A, F.C.A.
 - President-Elect, Conference of Consulting Actuaries
- External Advisor
 - Harvey Fineberg, M.D., Ph.D.
 - President, Institute of Medicine

Committees

- Scientific Review Committee (Permanent)
 - David Dranove, Northwestern (Chair); Leemore Dafny, Northwestern; Katherine Ho, Columbia; David Meltzer, Chicago, Robert Town, Penn; Dale Yamamoto, Independent Consultant
- Data Integrity Committee (Permanent)
 - Ted Prospect, United Healthcare (Chair); Roy Goldman, Humana; Vivian Tan, Kaiser Permanente; Lisa Tourville, Aetna
- Utilization and Cost Report Committee
 - Sara Teppema, Society of Actuaries (Chair); David Newman, HCCI; Lisa Tourville, Aetna; Robert Town, Penn
- Data Set Committee
 - Stephen Parente, Minnesota Chair); Sally Duran, Independent Consultant; Joanne Spetz, UCSF; Carolina Herrera , HCCI; Leemore Dafny, Northwestern, Dave Knutson, Minnesota

Activities

- Health Care Cost and Utilization Reports
 - Timely, accurate information on trends, components and drivers of health care costs.
- Scientific Research
 - Access to data through HCCI.
 - Fundamental research on determinants of health care costs.

Activities

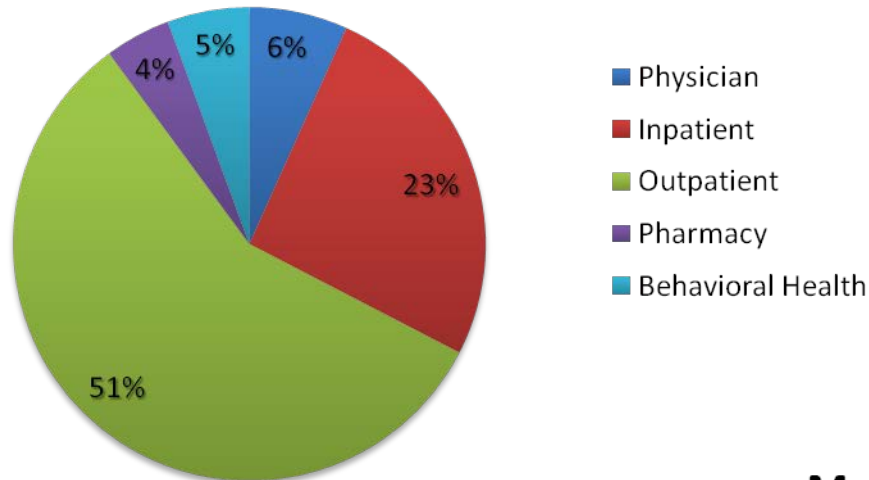
- Phase 1
 - Data pulled by individual insurers on a project by project basis.
 - Small # of projects.
 - Get to know data.
- Phase 2
 - Construct unified database.
 - Data Committee
 - Call for proposals to use the data.

Example of Calculations:

Comparison of Total Cost Growth by Population

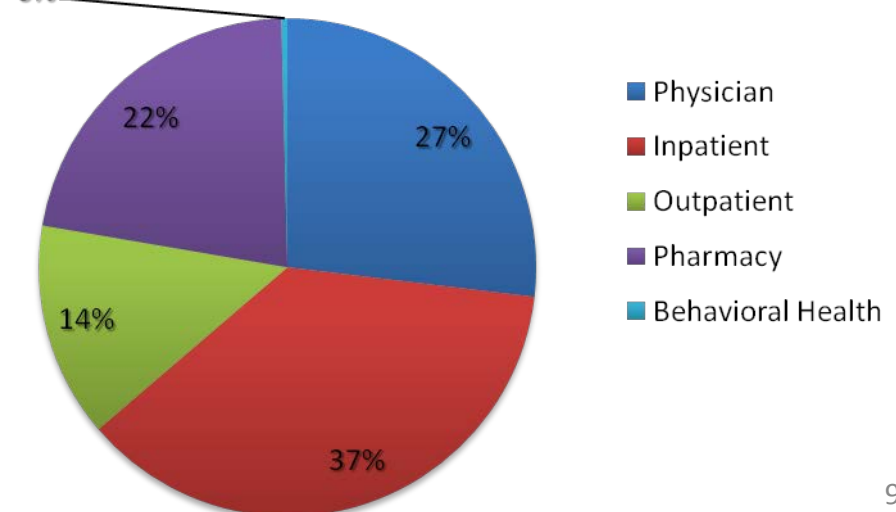
*Illustrative
Draft Only*

Commercial Services Growth - 2010



Charts represent portion of aggregate cost increase contributed by each service category.

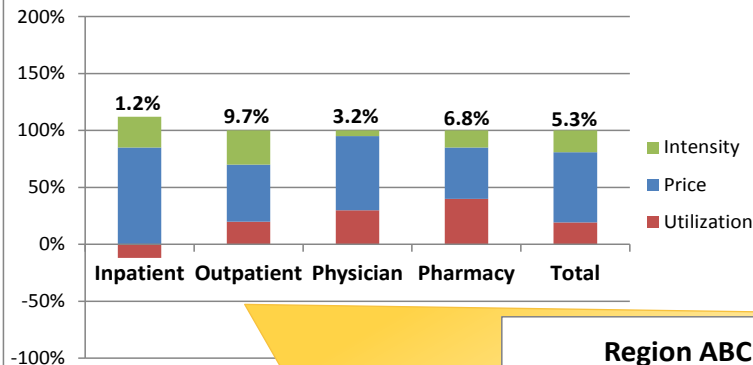
Medicare Services Growth - 2010



Example: Components of National Trend

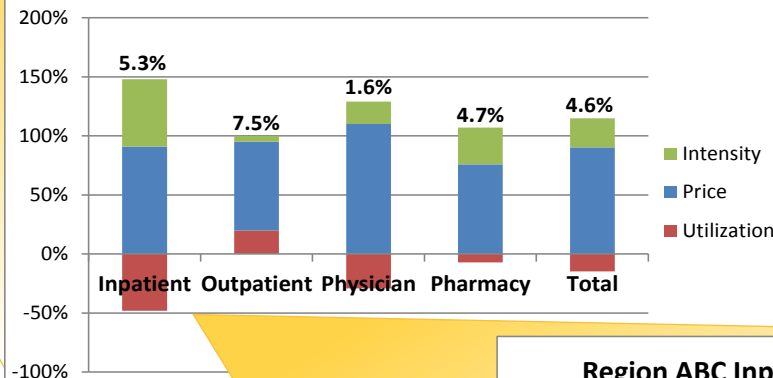
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National - Components of Per Capita Trend



Analysis of the last 12 months of commercial health care costs by service category and trend component has revealed a significant shift taking place within Inpatient services.

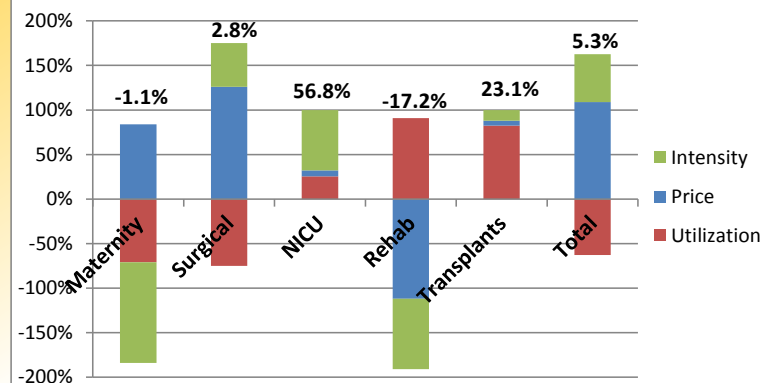
Region ABC - Components of Per Capita Trend



Drilling into more detail, Region ABC shows the same phenomenon—significant decreases in admits, but over 5% total cost trend driven by unit price and intensity.

Finally, looking at the Region ABC's Inpatient trends by admission type, several categories show the same pattern. Further investigation into what types of diagnoses could be done to further pinpoint this trend driver.

Region ABC Inpatient - Trend by Admission Type



Phase 1 Research Projects

- The effects of aging on health care costs.
 - Dale Yamamoto, Society of Actuaries.
- Geographic variation in health care utilization and costs.
 - Institute of Medicine, National Academy of Sciences.
- The effects of business cycles on health insurance risk pools.
 - David Dranove, Craig Garthwaite, Chris Ody, Northwestern University.
- Price Indices for Medical Services.
 - Bureau of Economic Analysis, U.S. Department of Commerce.
- Determinants of and variation in hospital pricing.
 - Zack Cooper, Yale, Martin Gaynor, Carnegie Mellon, John Van Reenen, London School of Economics.

Health Insurance Claims Data

- Record is a claim
 - Claim occurs when an insured individual obtains services/care/products that are covered in whole or in part.
- Information
 - Individual information
 - Unique ID (for that plan or insurer)
 - Age
 - Sex
 - Zipcode
 - Type of insurance (Commercial: HMO, PPO, ..., Medicare, Medicaid)
 - Employer Information
 - Unique ID
 - # of employees
 - Standard Industry Classification (SIC) code

Data

- Provider Information

- Provider ID
- Provider Type (Hospital, Doctor/Specialty, Pharmacist, Prison, ...)
- Provider Location

- Claim Information

- Date(s)
- Diagnosis codes (ICD-9)
 - DRGs
- Procedure codes (CPT-4, HCPCS)
- Drug codes (NDC)
- Quantities
 - Admissions, Lengths of Stay
 - Prescriptions, Days Supply
- Charges
- Allowed amounts
- Amount(s) paid by individual
- Type of admission (emergency, elective, newborn, trauma,...)
- Type of discharge (home, nursing home, dead, ...)
- Branded vs. generic drugs